

IN THE CLAIMS:

1. (Currently Amended): A method of performing a bulk read, comprising:

creating a socket structure for a socket associated with a logical port, wherein the socket structure contains a socket receive buffer;

initiating, by a user associated with the logical port, a bulk read function having a bulk read size;

storing the bulk read size in a field in the socket structure;

checking a state of the flag in the socket structure;

determining if an amount of data stored in the socket receive buffer is equal to or greater than the bulk read size, if the flag is set; [[and]]

activating the bulk read function only when there is an amount of data in the socket receive buffer equal to or greater than the bulk read size in response to setting of the flag in the socket structure; and

informing a sending device that a full window size of data is available in the socket receive buffer, if the flag is set and the amount of data stored in the socket receive buffer is less than the bulk read size.

2. (Previously Presented): The method of claim 1, wherein the user is an application associated with the logical port.

3. (Previously Presented): The method of claim 1, wherein the bulk read size is a size identified by the user.

4. (Canceled)

5. (Canceled)

6. (Currently Amended): The method of claim [[5]] 1, wherein if the amount of data stored in the socket receive buffer is less than the bulk read size, the bulk read function is not activated.

7. (Original): The method of claim 6, further comprising:

receiving a Transport Control Protocol (TCP) segment from a sending device, wherein the steps of checking the state of the flag in the socket structure and determining if an amount of data in the socket receive buffer is less than the bulk read size are performed in response to receiving the TCP segment.

8. (Original): The method of claim 7, wherein if the amount of data stored in the socket receive buffer is less than the bulk read size, an acknowledgment is sent to the sending device for every alternate TCP segment received.

9. (Currently Amended): The method of claim [[5]] 1, wherein the steps of checking a state of the flag, determining if an amount of data stored in the socket receive buffer is less than the bulk read size, and activating the bulk read function are performed in a Transport Control Protocol (TCP) layer.

10. (Canceled)

11. (Currently Amended): The method of claim [[4]] 1, wherein activating the bulk read function includes:

copying an amount of data equal to the bulk read size from the socket receive buffer to an application buffer; and
resetting the flag.

12. (Original): The method of claim 11, wherein activating the bulk read function further includes:

determining if there is data stored in the socket receive buffer after copying the amount of data equal to the bulk read size from the socket receive buffer to the application buffer; and
sending a window update to a sending device if there is data stored in the socket receive buffer after the copying.

13. (Currently Amended): An apparatus for performing a bulk read, comprising:

means for creating a socket structure for a socket associated with a logical port, wherein the socket structure contains a socket receive buffer;

means for initiating, by a user associated with the logical port, a bulk read function having a bulk read size;

means for storing the bulk read size in a field in the socket structure;

means for checking a state of the flag in the socket structure;

means for determining if an amount of data stored in the socket receive buffer is equal to or greater than the bulk read size, if the flag is set; [[and]]

means for activating the bulk read function only when there is an amount of data in the socket receive buffer equal to or greater than the bulk read size in response to setting of the flag in the socket structure; and

means for informing a sending device that a full window size of data is available in the socket receive buffer, if the flag is set and the amount of data stored in the socket receive buffer is less than the bulk read size.

14. (Previously Presented): The apparatus of claim 13, wherein the user is an application associated with the logical port.

15. (Previously Presented): The apparatus of claim 13, wherein the bulk read size is a size identified by the user.

16. (Canceled)

17. (Canceled)

18. (Currently Amended): The apparatus of claim ~~[[17]]~~ 13, wherein if the amount of data stored in the socket receive buffer is less than the bulk read size, the bulk read function is not activated by the means for activating the bulk read function.

19. (Original): The apparatus of claim 18, further comprising:

means for receiving a Transport Control Protocol (TCP) segment from a sending device, wherein the means for checking the state of the flag in the socket structure and means for determining if an amount of data in the socket receive buffer is less than the bulk read size operate in response to receiving the TCP segment.

20. (Original): The apparatus of claim 19, further comprising a means for sending an acknowledgment to the sending device for every alternate TCP segment received, if the amount of data stored in the socket receive buffer is less than the bulk read size.

21. (Currently Amended): The method of claim [[17]] 13, wherein the means for checking a state of the flag, means for determining if an amount of data stored in the socket receive buffer is less than the bulk read size, and means for activating the bulk read function are part of a Transport Control Protocol (TCP) layer.

22. (Canceled)

23. (Currently Amended): The apparatus of claim [[16]] 13, wherein the means for activating the bulk read function includes:

means for copying an amount of data equal to the bulk read size from the socket receive buffer to an application buffer; and
means for resetting the flag.

24. (Original): The apparatus of claim 23, wherein the means for activating the bulk read function further includes:

means for determining if there is data stored in the socket receive buffer after copying the amount of data equal to the bulk read size from the socket receive buffer to the application buffer; and

means for sending a window update to a sending device if there is data stored in the socket receive buffer after the copying.

25. (Currently Amended): A computer program product in a computer readable medium for performing a bulk read, comprising:

instructions for creating a socket structure for a socket associated with a logical port, wherein the socket structure contains a socket receive buffer;

instructions for initiating, by a user associated with the logical port, a bulk read function having a bulk read size;

instructions for storing the bulk read size in a field in the socket structure;

instructions for checking a state of the flag in the socket structure;

instructions for determining if an amount of data stored in the socket receive buffer is equal to or greater than the bulk read size, if the flag is set; [[and]]

instructions for activating the bulk read function only when there is an amount of data in the socket receive buffer equal to or greater than the bulk read size in response to setting of the flag in the socket structure; and

instructions for informing a sending device that a full window size of data is available in the socket receive buffer, if the flag is set and the amount of data stored in the socket receive buffer is less than the bulk read size.

26. (Previously Presented): The computer program product of claim 25, wherein the user is an application associated with the logical port.

27. (Previously Presented): The computer program product of claim 25, wherein the bulk read size is a size identified by the user.

28. (Canceled)

29. (Canceled)

30. (Currently Amended): The computer program product of claim ~~[[29]]~~ 25, wherein if the amount of data stored in the socket receive buffer is less than the bulk read size, the instructions are not executed.

31. (Previously Presented): The computer program product of claim 30, further comprising: instructions for receiving a Transport Control Protocol (TCP) segment from a sending device, wherein the fourth instructions for checking the state of the flag in the socket structure and fifth instructions for determining if an amount of data in the socket receive buffer is less than the bulk read size are executed in response to receiving the TCP segment.

32. (Previously Presented): The computer program product of claim 31, further comprising instructions for sending an acknowledgment to the sending device for every alternate TCP segment received, if the amount of data stored in the socket receive buffer is less than the bulk read size.

33. (Currently Amended): The computer program product of claim [[29]] 25, wherein the instructions for checking a state of the flag, instructions for determining if an amount of data stored in the socket receive buffer is less than the bulk read size, and instructions for activating the bulk read function are executed in a Transport Control Protocol (TCP) layer.

34. (Canceled)

35. (Currently Amended): The computer program product of claim [[28]] 25, wherein the instructions for activating the bulk read function include:

instructions for copying an amount of data equal to the bulk read size from the socket receive buffer to an application buffer; and
instructions for resetting the flag.

36. (Previously Presented): The computer program product of claim 35, wherein the instructions for activating the bulk read function further include:

instructions for determining if there is data stored in the socket receive buffer after copying the amount of data equal to the bulk read size from the socket receive buffer to the application buffer; and

instructions for sending a window update to a sending device if there is data stored in the socket receive buffer after the copying.

37. (Original): The method of claim 1, further comprising placing the bulk read function in an inactive state if an amount of data in the socket receive buffer is not equal to or greater than the bulk read size.

38. (Original): The apparatus of claim 13, further comprising means for placing the bulk read function in an inactive state if an amount of data in the socket receive buffer is not equal to or greater than the bulk read size.

39. (Currently Amended): The computer program product of claim ~~[[29]]~~ 25, further comprising instructions for placing the bulk read function in an inactive state if an amount of data in the socket receive buffer is not equal to or greater than the bulk read size.